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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/683,791	10/14/2003	Ki-Chul Kim	1315-047	2175
22429	7590	02/01/2006	[REDACTED]	EXAMINER THEISEN, DOUGLAS J
LOWE HAUPTMAN GILMAN AND BERNER, LLP 1700 DIAGONAL ROAD SUITE 300 /310 ALEXANDRIA, VA 22314			[REDACTED]	ART UNIT 1724 PAPER NUMBER

DATE MAILED: 02/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/683,791	KIM, KI-CHUL	
	Examiner Douglas J. Theisen	Art Unit 1724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 15 December 2005.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,2 and 5-17 is/are pending in the application.
- 4a) Of the above claim(s) 5 and 6 is/are withdrawn from consideration.
- 5) Claim(s) 1,7,9,11,13 and 15-17 is/are allowed.
- 6) Claim(s) 10,12 and 14 is/are rejected.
- 7) Claim(s) 2 and 8 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of the invention of Group I, claims 1-4, drawn to a debubbling apparatus in the reply filed on 15 December 2005 is acknowledged. The traversal is on the ground(s) that claims 5 and 6 depend on claims 1 and 9, respectively, and, as such, claims 5 and 6 are not separate and distinct from claims 1 and 9. This is not found persuasive because the invention of Group I, claims 1-4, drawn to a debubbling apparatus is patentably distinct from the invention of group II, drawn to a molding method.

The requirement is still deemed proper and is therefore made FINAL.

2. This application contains claims 5-6 drawn to an invention nonelected with traverse in the reply filed on 15 December 2005. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

### ***Response to Arguments***

3. Applicant's arguments, see page 6, lines 8-10 filed 15 December 2005 with respect to the rejection(s) of claim(s) 1 and 2 under 35 U.S.C. 102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of the new matter added in claims 10, 12, and 14.

Applicant's arguments, see page 6, lines 11 and 12 with regard to claims 7 and 8 and page 2, the amendment to paragraph 29, do not address the issue raised by the Examiner in the Office Action of 15 September 2005 on page 4, paragraph 8. The Examiner made no comments

concerning that “the debubbling pipes are on opposite sides of a center line of the body plate”. The Examiner made no comments concerning that “the handle extends on opposite sides of a center line of the body plate”. The Examiner stated: “Claims 1 and 2 are objected to because of the following informalities: Claims 1 and 2 and paragraphs 29 and 30 do not make clear the position of the debubbling pipes in relationship to the handle. The drawings clearly show that the debubbling pipes are located on one side of the body plate and that the handle is on the opposite side of the body plate from the debubbling pipes. It is suggested that the language of the claims and the specification be changed to indicate that the debubbling pipes and the handle are on opposite sides of the body plate.” The Examiner finds the use of the word “backside” in claim 2 and in paragraph 30 to be unclear as to the position of the handle in relationship to the position of the debubbling pipes. The drawings clearly show that the debubbling pipes are located on one side of the body plate and that the handle is on the opposite side of the body plate from the debubbling pipes. Or in applicant’s words from claim 15: “the body plate includes a handle on a first face thereof opposite from a second face thereof from which the debubbling pipes extend”.

***Specification***

4. The disclosure is objected to because of the following informalities: The amendment to the specification on page 2 of the reply dated 15 December 2005 is to paragraph 29, not to paragraph 31 as indicated. The amendment does not address the issue raised by the Examiner. See comments in Response to Arguments, supra. It is suggested that paragraph 30 be amended to include language similar to that in claim 15 to indicate the position of the handle in

relationship to the position of the debubbling pipes. The addition of the phrase “on opposite sides” to lines 3 and 4 of paragraph 29 now makes it appear that the debubbling pipes are on both faces of the body plate.

Appropriate correction is required.

5. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The specification does not indicate that “the debubbling pipes are on opposite sides of a center line of the body plate” as indicated in claims 7, 11, and 12. The specification does not indicate that “the handle extends on opposite sides of a center line of the body plate” as indicated in claims 8. The specification does not indicate that “the holes are at the side of, and along the lengths of, the debubbling pipes at different distances from the body plate” as indicated in claim 9. The specification does not indicate that “the body plate includes a handle on a first face thereof opposite from a second face thereof from which the debubbling pipes extend” as indicated in claim 15. The specification does not indicate that “the handle extends on opposite sides of a center line of the first face” as indicated in claim 16. The specification does not indicate that “the debubbling pipes are located on opposite sides of a center line of the second face” as indicated in claim 17.

### ***Claim Objections***

The status identifiers for claims 5 and 6 are incorrect. The correct status identifier for claims 5 and 6 is “withdrawn”. Applicant is reminded of the need to use the correct status identifiers in response to the Office. Otherwise, the response will be held non-compliant.

6. Claim 9 is objected to because of the following informalities: “emersion” should be “immersion”. Appropriate correction is required.

Claims 2 and 8 are objected to because of the following informalities: The use of the word “backside” in line 2 makes it unclear as to the position of the handle in relationship to the position of the debubbling pipes. The drawings clearly show that the debubbling pipes are located on one side of the body plate and that the handle is on the opposite side of the body plate from the debubbling pipes. Or in applicant’s words from claim 15: “the body plate includes a handle on a first face thereof opposite from a second face thereof from which the debubbling pipes extend”. It is suggested that claim 2 be amended to use the language of claim 15.

7. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 10, 12, and 14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no description in the specification and there is nothing in the figures that indicate “the bubbling holes have differing angular positions around the perimeters of the debubbling pipes”.

*Allowable Subject Matter*

10. Claims 1, 7, 9, 11, 13, and 15-17 allowed.

*Conclusion*

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

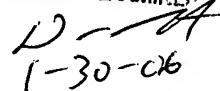
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas J. Theisen whose telephone number is 571-272-1168. The examiner can normally be reached on Monday, Tuesday, and Wednesday 6:30 until 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

djt

DUANE SMITH  
PRIMARY EXAMINER

  
1-30-06